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# Worldwide Report

TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT

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# WORLDWIDE REPORT

# TELECOMMUNICATIONS POLICY, RESEARCH AND DEVELOPMENT No. 225

## CONTENTS

## WORLDWIDE AFFAIRS

	Briefs USSR-FRG TV Protocol	:
	ASIA	
AUSTRA	LIA	
	Congress Hears Business Views on Satellite Situation (Nicholas Rothwell; THE AUSTRALIAN, 13 May 82)	. 2
	Access, Not Capacity, Termed Domestic Satellite's Problem (THE COURIER-MAIL, 15 May 82)	3
	'Massive' Expense of New Domestic Satellite Questioned (Kenneth Davidson; THE AGE, 10 May 82)	4
	Computers Help Manage North West Shelf Gas Project (Don Maddocks; THE AGE, 11 May 82)	8
	Australian Robotics Industry Poised for Broad Expansion (THE AUSTRALIAN, 11 May 82)	9
	Briefs Radio-Phone Expansion	10
INDIA		
	National Television Network May Promote Integration (Editorial; THE HINDU, 21 May 82)	11
	Briefs Three Major Space Projects Approved Satellite TV Broadcasts To Begin 15 Aug	12 12

INDONESIA						
	Briefs	Earth Stations Tvri Relay Station Irian Jaya Commander	13 13 13			
JAPAN						
	Briefs	Committee Reviews International Broadcasting	14			
NEW ZEALAND						
	Ministe	er Studying Information Technology in UK, U.S.  (NEW ZEALAND HERALD, 6 May 82)	15			
٠	Governm	ment Assistance to Electronics Industry Proposed (EVENING POST, 7 May 82)	16			
	Closure	e of Radio New Zealand Shortwave Service Deferred (EVENING POST, 12 May 82)	17			
PEOPLE'S REPUBLIC OF CHINA						
	Briefs	Zhejiang Telephone Cables Zhejiang Submarine Cables	18 18			
SOUTH KOREA						
	Large I	Broadcasting Center To Be Built (YONHAP, 22 Jun 82)	19			
EAST EUROPE						
INTERNATIONAL AFFAIRS						
	Briefs	'TASS', TANJUG' Officials Sign Cooperation Accord	20			

## LATIN AMERICA

PANAMA

Briefs
Direct Dialing Expansion 21

## NEAR EAST AND NORTH AFRICA

INTERNA	ATIONAL AFFAIRS	
ı	Briefs TV to Troops in S. Lebanon	22
	SUB-SAHARAN AFRICA	
LESOTHO		
,	Briefs UNESCO Mission Arrives	23
	WEST EUROPE	•
DENMARK	ζ	
	Faeroese Television Will Be Operated by Private Group (Ulf Stambej; HUFVUDSTADSBLADET, 9 May 82)	24
DENMARK	K/GREENLAND	
	Inuksat Satellite To Allow Direct Dialing to Denmark (GRONLANDSPOSTEN, 19 May 82)	28
	Expansion of Godthaab Exchange To Aid Inter-City Phone Net (GRONLANDSPOSTEN, 12 May 82)	29
	Briefs Telegraph's Role Being Reduced	30
NORWAY		
	Minister Discusses Need for Nordic TV Satellite (Morten Malmo; AFTENPOSTEN, 18 May 82)	31
	Government Opens Up Telecommunications To Bids From Abroad (AFTENPOSTEN, 9 Jun 82)	35
	Communications Industry's Problems in Global Market Aired (Peter Planke; AFTENPOSTEN, 12 May 82)	37

USSR-FRG TV PROTOCOL--A working protocol for this year was signed in Moscow today on cooperation between the USSR's State Committee for Television and Broadcasting and West Germany's Second Program. A program was outlined for increasing the excahnge of television material about life in the two countries and filming programs about big events in the USSR and the FRG. The protocol was signed by Lapin, Chairman of the USSR's State Committee for Television and Radio Broadcasting, and Apel, Director of West Germany's Second Program. [Text] [LD080350 Moscow DOMESTIC SERVICE in Russian 1000 GMT 7 June 82] 0239

CSO: 5500/2269-F

CONGRESS HEARS BUSINESS VIEWS ON SATELLITE SITUATION

Canberra THE AUSTRALIAN in English 13 May 82 p 14

[Article by Nicholas Rothwell]

[Text] CURRENT government controls on business use of new communications technologies should immediately be relaxed says the head of Australia's leading satellite communications group.

In a strongly worded worded plea to yesterday's ANZAAS congress, Mr Peter Holmes a Court, general manager of the Business Telecommunications Services consortium, told the congress that the opportunities created by the Government's decision to proceed with a national communications satellite were strictly dependent on the rules drawn up for use of the facility.

Last week, the Government announced that it had authorised its fully owned AUSSAT company to order three communication satellites and two giant ground control stations.

The satellites will have set technical specifications, ending extensive speculation over the design of the system.

"But we are still speculating over who will be permitted to lease capacity on the satellites and for what purpose," Mr Holmes a Court said.

The announcement of the satellite decision in Parlia-

ment included assurances that private companies would be free to use the satellite system and have access to it on exactly the same terms and conditions as were offered by AUSSAT.

Mr Holmes A Court said this announcement indicated that AUSSAT — a private tax-paying company — was to be permitted to establish a network between capital cities and to carry end-user in-formation.

The statement made by the Government on the AUS-SAT network and other private enterprise networks showed that their true role would be conditioned by the findings of the Davidson inquiry, due to report this September.

"We in BTS of course and all potential users and providers of satellite services, await the outcome of the inquiry with great interest," Mr Holmes a Court said.

But satellites were not a cureall for Australia's telecommunications problems nor should the satellite be considered purely as a means to do what is done now either faster, better, or cheaper.

Satellites had unique capabilities since they could communicate over long distances without costs rising as distance increased.

But satellites were not eco-

nomic over short distances unless large volumes were involved and provision of security for satellite communication required expensive signal coding.

Business had been attacked for its unwillingness to commit itself to the satellite but the business community had not been given enough information to assess the satellite system.

Industry leaders needed to be told what the federal government's policy would be on television networking, cable TV, national telecommunications policy and on the possibility of a link between private and public networks.

There was a "log jam" of policy decisions to be made and potential users of the satellite had little option, despite recent "heartening" indications, to delay their plans until the Government made some hard decisions.

"Inevitably and unavoidably the present regulatory environment has to be relaxed for it is plainly at variance with the nature of the new technologies.

"This is the only way to attract broad use of the new technologies, the innovation in services that they make possible and the opening up of new business opportunities," Mr Holmes a Court warned.

ACCESS, NOT CAPACITY, TERMED DOMESTIC SATELLITE'S PROBLEM

Brisbane THE COURIER-MAIL in English 15 May 82 p 10

[Report from Australian and New Zealand Association for the Advancement of Science Congress in Sydney]

[Text] SYDNEY. - The real problem associated with the Australian domestic satellite was one of access rather than capacity, the ANZAAS Congress was told here yesterday.

Communications Department officer Mr John Gillam said many community groups who expected to be minor users of the satellite did not appreciate that there were legislative boundaries and market constraints.

"The question of access is the real problem," he said.

At the moment the existing structure of Australian communications services came under five Acts: Postal Services, Telecommunications, Wireless Telegraphy, Overseas Telecommunications and Broadcasting and Television.

"The combined effect of the Acts has been to divide the Australian communications services

tralian communications services market into identifiable sectors," Mr Gillam said.

"Nowadays the distinctions are not so simple with the introduction of new communications services.

"Other people and organ-isations wanting to enter the communications market are looking for more flexibility in the boundary and regulatory conditions to allow them scope to exploit the new technologies fully.'

Mr Gillam said the Bradley in-

quiry into Australia Post's monopoly, the Davidson telecommunications services inquiry, and the Jones cable-TV inquiry, outcomes of which were expected by the end of the year, could be important in determining just who could use the satellite, expected to be established in mid-

In a possibly unprecedented move, a group of scientists and miners got together at the congress and passed a resolution urging the Federal Government to set aside enough money in the coming Budget to upgrade Land-sat facilities, so that Australia would retain the ability to detect and map new resources through satellite technology.

'MASSIVE' EXPENSE OF NEW DOMESTIC SATELLITE QUESTIONED

Melbourne THE AGE in English 10 May 82 p 17

[Article by Kenneth Davidson]

[Text] How would you like a gift of around \$40,000 and \$2000 supplement each year from the Fraser Government?

Not bad in thest days of fiscal stringency.

I bet you would jump at the chance. But, given the fact that you are likely to be living in Victoria or one of the capital cities rather than the Great Sandy Desert of Western Australia or the Stuart Plain of the Northern Territory, it is more likely that you will be helping pay rather than receiving.

However, this is the legacy left by the former Minister for Communication, Mr Sinclair, on your behalf to some 2000 households in the remote areas of Australia before Mr Fraser recast him as Minister for Defence where it is hoped he confronts his admirals with the question of what is done with one aircraft carrier without air cover in the age of modern warfare.

Of course, the gift to some 2000 communities and to households comes in the form of the new satellite system which was announced last week by the Minister.

In fairness, the people in the remote regions who will benefit from the new automatic telephone system to Australia did not ask for it to be given to them. I am quite sure that most homesteads and communities, if asked, would have preferred to take the money and put up with the inconvenience of the present flying doctor, open party-line system of communication.

So if Mr Sinclair's more remote constituents did not put the Country Party and the Government up to this \$650 million extravaganza, then who did? Answering this question involves asking who benefits from the project.

On top of this there will be a capital cost of about \$300,000 for each ABC television station so that it can transmit and receive within the new satellite network.

Is the multi-million dollar cost of bringing the last 100,000 Australians within range of television reception worth the cost? Surely, given the money involved and the other pressing welfare demands on the Government which cannot be met either because it would spoil the recipients or cost too much it is at least worth some debate?

Thus, providing that the 30,000-odd households now without any TV reception spend \$1000 for a receiving dish, the ABC network will cover 100 percent of households compared to 98 per cent now.

The terrestial network provided by Telecom presently costs the ABC about \$3 million a year and this covers 98 per cent of the population.

What is the cost of covering the other 2 per cent of the population? The annual cost of hiring one transponder is in the order of \$3 million a year. This indicates the basic cost of the new satellite will be in excess of \$20 million a year.

Aussat will put up two satelliteswhich will carry 30 transponders between them. So far 18 have been allocated—11 to the ABC including four for remote services—four to the Department of Transport (presumably now Aviation), two to Papua and New Guinea and one to Telecom.

The ABC will have five of the eight high-powered transponders which allows individual TV receivers to receive signals direct from the satellite with the use of a dish which will cost around \$1000 for each television receiver.

Surely it is not simple enough to point to the engineers who are engaged in the project and are going to have a lot of fun, or to Hughs Communications International and the other contracting companies which presumably will make a lot of money. After all, Australia is not a banana republic yet.

Will the benefits of the satellite to transport or ultimately private business prove so large that the profits will more than cover the cross subsidy needed to avoid making the general taxpayer pick up the bill?

The satellite is to be used for air navigation. As I understand the situation, the cost of air navigation via satellite will be more than the cost of the present system and it will provide a more comprehensive service.

But do we need a more comprehensive air navigation service which will add to navigation charges and thus to fares? Australia already has one of the best air safety records in the world.

It would appear that money spent in improving road safety would have a much higher return—for instance a couple of under or overpasses at dangerous intersections is likely to save more lives over the course of the years than any improvement in air havigation, as desirable as these improvements might be.

This leaves the question of the comparitive cost of terrestial and satellite trunk telephone services.

Terrestial services are distance dependent and satellite services are distance independent in terms of costs. Satellite communications begin to compare favorably with terrestial communications when the distance exceeds 3200 kilometres, or in excess of the distance of Perth from Melbourne. The Satellite communications system is flexible whereas the terrestial system is fixed but the carrying capacity of each pair of transponders receiving and transmitting messages is reduced according to the number of different destinations for each trunk call carried.

Thus, a pair of transponders carrying messages exclusively between Melbourne and Sydney could simultaneously carry 1000 conversations, but a variety of receiving and transmitting points could reduce the capacity of the transponders to about 100 conversations.

Thus, if a transponder costs \$3 million a year to rent, the cost of each trunk line capacity provided is between \$6000 and \$60,000 a year.

By comparison, the capital cost (not the operating ocst) of each additional trunk line capacity between Melbourne and Sydney is about \$7000.

Of course, satellite telephone communication provides a back-up to terrestial, but terrestial operates via micro-wave and cable and there appears to be plenty of back-up capability throughout the main trunk system except between Darwin and Perth, which could be overcome in an emergency by coming the long way.

So far it would appear that the Government's \$650 million company is merely a gigantically expensive exercise in bringing the comforts of city electronic communications to the remote bush.

The ABC is to lavish money on the latest whiz bangs in order to get its potential audience up 2 per cent, while the Government cold bloodedly starves the ABC of money for programming that would make the ABC worth watching.

Transport is to spend money on air safety which will be lucky to save a life ever, while the huge potential for saving lives on the ground is ignored.

And finally Telcom is to invest in a high-cost trunk system while funding for the present lower-cost system is starved of funds so that fast-growing areas such as northern NSW have inadequate telephone services.

So who gains? Surely the Government can find more cost-effective ways of buying votes in rural areas and in any case quite a lot of the beneficiaries are going to be Aboriginals who vote Labor.

It would appear that the answer to that question will only be known when it is known who is going to acquire the 12 spare transponders which have yet to be allocated.

Among those 12 transponders are three high-powered transponders—enough to set up a direct television network alongside that of the ABC which could cut out the so-called independent country television station.

I know that the Government has made cast-iron guarantees to regional television operators that their interests will be protected, but there is still some way to go before those promises are bankable, especially as the Liberal Party rather than the Country Party now has its hands directly on this patronage till.

COMPUTERS HELP MANAGE NORTH WEST SHELF GAS PROJECT

Melbourne THE AGE in English 11 May 82 p 31

[Article by Don Maddocks]

[Text]

Woodside Petroleum has installed six new computers to help manage its North West Shelf gas project.

The computers, Data General MV8000s, form the heart of the company's head office network in Perth, which extends as far north as Geraldton and the Burrap Peninsula.

Woodside's data processing manager, Mr Jeremy Holton, said the new computers were also linked to Shell Oil's computes in Victoria.

The new installation included more than 150 terminals, plus plotters and other graphic devices.

The communications system would link several key construction companies who work with Woodside. All would be on-line, Mr Holton said.

He said the new installation would cover a broad range of administration tasks, including control of contracts, progress payments, correspondence, drawing numbers and revisions, as well as keeping track of material. The system has been designed for "non expert"

"It has been assumed that the people using the terminals are not efficient typists or computer experts," said Mr Holton. "The system guides the user through operations step by step, offering clear choices, with 'help' commands if anything goes wrong."

Mr Holton said the new system offered the flexibility to allow for continuous planning and the development of new systems.

"The MV8000s allow us to get systems off the ground very quickly, which is vital in a rapidly changing construction project," he said.

"The system is very flexible and can easily be expanded." Woodside is operating more than 40 different applications on the DG computer. "There is a lot of integration between our systems," Mr Holton said. "We share files between applications, and also interface with other networks and systems."

He said one of the characteristics of the network, was the need to switch systems from one computer to another often without the user knowing about it.

The applications also included accounting and technical systems for engineering and

exploration.

But one of the most important applications was the new Contract. Progress System, which monitored expenditure at an item level on claims against a contract.

## AUSTRALIAN ROBOTICS INDUSTRY POISED FOR BROAD EXPANSION

Canberra THE AUSTRALIAN in English 11 May 82 p 22

[Text]

AUSTRALIA'S fledgling robotics industry is on the brink of rapid development, expected after dramatic improvements in the performance and flexibility of automated production systems, announced at this week's ANZAAS meeting of the Australian Robot Association.

Presentations to the meeting, which is being attended by leading international speakers, built up a picture of impressive innovations in both research and applied robotics over the past year, which also saw the introduction by Sydney University of the nation's first honors-level degree course in robotics.

The University's Basser Department of Computer Science has just acquired a PUMA 500 robot for practical workshop exercises in programming, and in the commercial sector, several major overseas robot manufacturers have completed arrangements for their equipment to be distributed in this country.

Following an agreement between the American company, Prab Robots Inc, and Murata Machinery of Japan, the eight major Prab robot models will be made under license and sold throughout the Far East, including Australia, by Murata.

The Japanese company already manufactures automated transport carts and components of automated manufacturing systems, and will now be well placed to supply for the Australian domestic market integrated production systems that include the Prabrobot models as components

Already 15 Prab units are in operation in Australia, and a drive to sell robotic and computer-controlled manufacturing systems in this country has been launched by a rival supplier, Simpson Ltd.

Simpson's Special Purpose Equipment Division has announced that it will make custom-built single and

double-arm "pick-and-place" robots

for automated production lines.

The Simpson "pick and place" machines are commanded by a Texas Instruments programmable controller, while the company is planning to integrate more complex "continuous path" robot systems made by other manufacturers into a complete production "cell" - a complex unit of interacting robot assemblers.

Industry advances in applying robot systems and arranging for technology transfers to local high-technology companies have been matched by Australia's research establishment, in the form of CSIRO's operational "integrated engineering cell"

The CSIRO project, run by the Division of Manufacturing Technology in Victoria, is intended to "undertake re-search relevant to Australian industry in the areas of computer-aided computer-aided planning and manufacturing, robotics and the application of microprocessors in the control of industrial processes"

The manufacturing technology group aims to concentrate on transfers of its demonstration system which shows the benefits of a flexible manufacturing cell for batch production on a single assembly line - from the CSIRO to commercial industry.

The cell is now fitted with several state-of-the-art automated produc-tion machines including a Zenford-Ziegler three-axis modelling machine, an ANCA numerical controller, a Machine Dynamics pick and place robot, a Unimation PUMA 600 continuous path robot amd an Automatix industrial vision system with twin cameras.

But despite promising developments in robotics both in Australia and the US, the outlook for the global robotics industry is less promising.

The American recession has cut into orders for new automated machines, which have as their main attraction the capacity to boost profit margins in highly competitive fields — a feature hardly in demand during economic downturns.

RADIO-PHONE EXPANSION--People living in the isolated districts from Meekatharra, Port Hedland and Carnarvon, will soon be able to make radio-telephone calls with ordinary telephone subscribers through the Royal Flying Doctor Services Radio base. New modifying equipment will be set up linking the bases with Telecom lines. Telecom will install two extra lines to the base, so that the service can be operated without over-utilising the existing subscriber line, which was installed primarily for emergency use. The base will not be working radio-telephone calls on the existing base subscriber lines. One of the new lines will be designated for booking lines and as its name implies will be used for Telecom subscribers, to telephone the base and book their radio-telephone calls to the outpost stations. These calls to the base are toll free. The other, called the access line, will be the line on which radio telephone calls are handled. The service will start on a trial basis at Meekatharra on May 17, 1982. Port Hedland and Carnarvon are expected to follow in about three to six months. The base radio officers will be responsible for transmitting and receiving the telephone calls and also for charging the callers. Telecom will provide the bases with a manual timing plot. [Excerpt] [Perth THE WEST AUS-TRALIAN in English 13 May 82 News of the North p 19]

#### NATIONAL TELEVISION NETWORK MAY PROMOTE INTEGRATION

Madras THE HINDU in English 21 May 82 p 8

[Editorial: "National TV Hook-Up"]

[Text] THE DECISION TO bring the Doordarshan stations in Delhi, Bombay, Pune, Bangalore, Madras, Mussoorie, Jullunder and Amritsar under a national hook-up from June 1 is to be welcomed: This has been made possible by the provision of a microwave link and Srinagar and Calcutta are expected to be brought into this scheme in the next few months. The new proposal will mean a change in the programme content from the local stations. During the prime viewing time between 8-30 p.m. and 10 p.m. it will be possible to have common programmes in all these centres. This doubtless holds the potential to infuse a sense of oneness among the viewers in different States and promote national integration. Television is yet to become a mass medium in the sense in which the radio, for instance, is though the latter has still a long way to go before it could be said that all

Television with its visual impact is a much more powerful medium than the radio. This precisely is why adequate importance should be given to improving the quality and content of the TV programmes. The regional stations quite often find it difficult to locate talent and a national hook-up will certainly be of help in removing this lacuna. National networking can also be adopted for programmes of common

the people living in the country are reached by its network. After Delhi, the Bombay Doordarshan kendra was commissioned in 1972 and those in other cities came a little later. There were 15.48 lakh licensed TV sets as on December 31, 1980 and it is officially estimated that about 18 per cent of the total population spread over 6.5 per cent area of the country are interest such as sports events taking place in other cities. While regional events should not be downgraded in the new arrangement, the telecasting of common programmes from Delhi — including English and Hindi newsbulletins — will demand of the local stations a special competence which is not yet in evidence, if they are to preserve and foster their identities. For one thing, their programmes and features could do with tighter editing to make them crisper and hold the interest of the viewers. An added advantage to the regional kendras following introduction of a national hook-up is the extension of the viewing time by one hour or more.

CSO: 5500/7151

covered.

THREE MAJOR SPACE PROJECTS APPROVED -- The center has cleared three major space projects costing over 3,950 million rupees. The projects will help India to launch 1,000-kilogram satellites into orbit in about 5 years. This is a leap forward compared to its present capacity to launch tiny satellites of 50 kilograms. The projects approved relate to the development of a satellite of 800kilogram class and two launch vehicles with a higher capacity. The satellite which will be designed and developed in India will be used for remote sensing. This will be the first step toward providing a national space system for resource information to be used in agriculture, water management, forestry, hydrology, geology and coastal oceanography. The two launch-vehicle projects include a medium-sized one which can launch a 150-kilogram satellite in nearearth orbit. The other one is the polar launch vehicle which can send up a 1,000-kilogram satellite into a sun-synchronous orbit. This project alone will cost over 3,110 million rupees and will be ready by 1988. The all-India radio's correspondent says that this project is a logical outcome of the launch-vehicle technology developed by India over the years. This includes the mastery of the solid-propellant systems and the acquisition of liquid-propulsion technology. [Text] [BK151701 Delhi DOMESTIC SERVICE in English 1530 GMT 15 Jun 82] 1032

SATELLITE TV BROADCASTS TO BEGIN 15 AUG--New Delhi, 16 Jun (AFB)--India's \$130 million weather and communications INSAT-lA satellite launched from Cape Canaveral 2 months ago has become "Quasi-operational" despite a jammed U.S.-built solar sail that would reduce its life by 2 years, the Indian Space Research Organization [ISRO] at Bangalore announced today. The 1,050-kilogram Ford Aerospace-built satellite's initial telecommunication, very-high resolution radiometer (VHRR) utilisation and radio networking are expected to stabilise by the end of this month and regular television operations through the satellite will begin 15 August, Press Trust of India Agency quoted an ISRO press statement as saying in the southern Indian city. The INSAT is the first spacedraft to combine the facilities of meteorology, radio-television and telecommunica-The ISRO said tests which started earlier this month had shown a significant improvement in the quality of reception for radio networking, and earth stations were functioning to plan. The stuck sail has, however, impaired the continuous operation of the radio-television transponder operations. The nondeployment of the umbrella-shaped sail, which functions to balance the satellite, is now expected to cause additional fuel expenditure for attitude maintenance, cutting the 7-year life of the craft to less than 5 years. Pending further simulations and studies, efforts on deploying the sail have been stopped, PTI added. [Text] [BK170501 Hong Kong AFP in English 0237 GMT 15 Jun 82]

EARTH STATIONS--Rusmin Nuryadin, communications minister, on 14 June symbolically launched five small-size earth stations in East Nusatenggara Province in Waikabubak. With the launching of the five small-size sations, there are now six stations in the province, one each in (Waibabuk), Maumere, Larantuka, (Kalawari), Atambua and Endeh. [Text] [BK161425 Jakarta DOMESTIC SERVICE in Indonesian 1500 GMT 15 Jun 82] 1129

TVRI RELAY STATION--Slamet Haryanto, inspector general of the Information Department, this evening launched the Tvri relay station of Gunungpandan, Saradan Subdistrict, Madiun District, East Java. The construction of the relay station costs more than 1,298 billion rupiah, secured from the 1981-1982 national as well as the East Java provincial budget. With the launching of the relay station, 99 percent of the East Javan population can now watch TV programs. The Gunungpandan relay station is to replace the existing relay station in Sarangan. [Text] [BK161425 Jakarta DOMESTIC SERVICE in Indonesian 1500 GMT 15 June 82] 1129

IRIAN JAYA COMMANDER--Jakarta, 15 Jun (Antara)--The post of commander of the XVII Military Area (Cendrawasih Division) was transferred from Army Brig Gen C. I. Santoso to Infantry Col Raja Kami Sembiring Leliala at a function held at Jayapura, Monday [4 Jun] in the presence of Army Chief of Staff General Poniman. Brig Gen Santoso will henceforth be assigned at the Army General Headquarters as a senior officer attached to the Army Chief. Colonel Sembiring, prior to his appointment, was Chief of Staff of the XIII Military Area (Merdeka Division) in Manado. [Excerpt] [BK161425 Jakarta ANTARA in English 1109 GMT 15 Jun 82] 1129

cos: 5500/2269-F

COMMITTEE REVIEWS INTERNATIONAL BROADCASTING -- Tokyo June 7 KYODO -- The Posts and Telecommunications Ministry Monday established a committee for investigation and research into international broadcasting in order to improve and strengthen Japan's public relations activities overseas. At the same time, the ministry asked Kyodo System Development Co., a leader in software technology, to conduct investigation and research into international broadcasting both from systems and technology aspects. Improvement of international broadcasting has been a matter of great interest not only to the government and ruling Liberal-Democratic Party (LDP) but also among the opposition parties. They have shown great interest in international broadcasting ever since the LDPs Special Committee on International Exchange advised Prime Minister Zenko Suzuki in July last year to strengthen Japan's overseas broadcasting to promote Japan's position and thinking abroad. With 8 million yen (\$32,650) appropriated, the ministry will investigate in fiscal 1982 the reception quality abroad of NHKs Radio Japan shortwave international broadcasts and study the feasibility of establishing overseas relay stations. [Text] [OW071143 Tokyo KYODO in English 1137 GMT 7 Jun 82] 8029

CSO: 5500/2269-F

## MINISTER STUDYING INFORMATION TECHNOLOGY IN UK, U. S.

## Auckland NEW ZEALAND HERALD in English 6 May 82 p 10

[Text] Press Assn Wellington
Public and private
broadcasting will be examined closely by the Minister of Broadcasting, Dr
Shearer, during a month-

long overseas trip.

Dr Shearer leaves this week for Britain where he will meet executives of the BBC, ITV and the Independent Broadcasting Authority.

A statement from the minister's office said yesterday that he would discuss public and private broadcasting, programme complaints procedures and educational radio and television.

Dr Shearer will also discuss developments in British information technology—viewdata, teletext. fibre optics and satellite communications.

He plans also to visit facilities operated by Thames-London Weekend Television, Visnews, British Telecoms and the General Electric Corporation.

His trip includes a United Nations environment programme conference in Natrobi and a scientific mission to Japan.

Dr Shearer's first stopover will be California's "Silicon Valley." where he will visit microchip manufacturing companies for a first-hand look at advances in microelectronic technology.

The minister then goes to Kenya where he will lead the New Zealand delegation to the United Nations Environmental Programme Session of Special Character.

There he will present a naper outlining the progress New Zealand has made in environmental protection since the 1972 Stockholm Environment Conference.

On the last leg of the trip. Dr Shearer will lead a team of officials to Japan as the first part of a mission designed to establish closer links with the Japanese in science and technology. A specialist horticultural technical mission will follow later in the year.

#### GOVERNMENT ASSISTANCE TO ELECTRONICS INDUSTRY PROPOSED

Wellington EVENING POST in English 7 May 82 p 6

[Text] The Industries Development Commission has proposed that special funds be set up by the Government to support New Zealand's electronics industry, which it claims is strategically vital to the economy.

The introduction of investment allowances, and the reduction of sales taxes, have also been proposed in the just-released draft report of the commission.

Interested parties have until the end of this month to express a desire to make submissions on the draft, which will then be heard at public meetings in July before the IDC brings down its final report for the Minister of Trade and Industry, Mr Templeton.

Electronics was one of 10 industries selected for study as a result of the 1979 budget, although the study was initially supposed to concentrate only on radio and television.

Figures collated from the 1980 year show that about 5000 people are directly employed in the industry in more than 150 different firms, more than half of which are located in Auckland.

## **Potential**

According to the IDC, the industry has the potential for

CSO: 5500/9030

a strong growth, with good export prospects. This applies in particular to the innovative and specialised uses of micro-electronics.

New Zealand was wellplaced to take advantage of these opportunities, and electronics would have an increasingly pervasive influence in the economy and in society at large.

"All sectors of the economy, especially agriculture, manufacturing and commerce, will have to make increasing use of electronics if New Zealand is to maintain and improve its international competitiveness. The commission believes that any economy which allows its electronics sector to lag behind world developments will become increasingly uncompetitive in the modern

world.

"A sophisticated and dynamic electronics sector is an essential prerequisite for New Zealand's economic development in an increasingly competitive world," the report says.

## **Assistance**

"For this reason the commission believes that wideranging assistances and incentive measures should be chanelled into this sector."

Main recommendations put forward by the IDC include: The provision of \$1.5 million annually to the applied technology programme to stimulate applied research and development in electronics.

• The establishment of a \$5 million electronics investment fund, administered by the Development Finance Corporation, to assist firms with finance during the early critical period of developing and launching new products with commercial potential until an adequate cash flow from sales has been achieved.

 The introduction of a 40 percent investment allowance and sales tax remission on new plant and machinery for firms undertaking approved development plans.

The reduction of the 40 percent sales tax on computers to 10 percent, except for microprocessor equipment which should be exempt from sales tax on individual application to the Minister of Customs.

• The use of government purchasing policies to assist the development of electronics, notably by the provision of better information on anticipated purchasing requirements and purchasing policies, and by the provision of separate funding for development contracts.

The encouragement of overseas investment in high-technology electronics industries in New Zealand, if necessary to be justified on a case by case basis by the provision of special incentives as alternatives to existing incentives for industry.

 The payment of a bounty or grant to local producers of computers to encourage

the growth of this embryonic sector which does not have frontier protection.

## Task force

The commission also recommends that a study be made of whether it is necessary to introduce a programme to encourage the use of micro-electronic systems in the products and process of all industries.

The IDC has also been asked by the Minister of Trade and Industry to organise a task force to made a "quick and intensive study" of all aspects of training in the electronics and electrical sectors and include recommendations in this respect in its final report on the industry.

### CLOSURE OF RADIO NEW ZEALAND SHORTWAVE SERVICE DEFERRED

## Wellington EVENING POST in English 12 May 82 p 6

[Text] Radio New Zealand's threatened shortwave service has been given a reprieve.

The chairman of the Broadcasting Corporation, Mr Ian Cross, announced to-day that in spite of the Government decision to end funding of shortwave radio, the corporation had decided to maintain the service at its own cost "meantime."

Mr Cross' announcement followed a monthly meeting of the corporation's board vesterday

yesterday.
"The board's view was
that it was bound to defer
the closure of the service to
enable Radio New Zealand

and other interested parties to explore all possible options for its continuance," he said.

"The corporation has received proposals involving other bodies joining Radio New Zealand in a shared use of the shortwave facility."

"A further possible alternative is for the BCNZ to commercialise the service. A re-equipment option also has been presented to us over the last couple of days for investigation," Mr Cross said.

"Against a background of public and political uncertainty, and the need to preserve the available frequencies for New Zealand, my board believes that it must as a matter of public interest postpone the closure of the service until all these options are fully explored.

"It will also be looking for a clear statement on principle, especially in the area of foreign relations, on the desirability of a short-wave service over the next decade," Mr Cross said.

"The country should be aware that the present transmission equipment is obsolete and that the lowest estimate of the capital cost of upgrading the service is \$2.5 million.

"In view of the lengthy list of deferred capital expenditure for the domestic television and radio services, my board believes that it has no present hope of meeting that cost."

Mr Cross said the board had established a supplementary budget to maintain a simple relay of the National Programme, while maintaining a transcription service to Pacific countries.

His statement did not specifically mention the proposal by the Christchurchbased religious station, Radio Rhema, to take over the shortwave facilities.

The service was funded by \$180,000 from the Ministry of Foreign Affairs, but the grant ended on March 31.

cso: 5500/9030

ZHEJIANG TELEPHONE CABLES--Hangzhou, 8 Jun (XINHUA)--Nine of 10 planned telephone cables between a number of Zhejiang Province's Zhoushan Islands have entered trial operation, according to the provincial posts and telecommunications department. The 10 cables, more than 200 kilometers long, began placement in May 1979. Now post offices on the islands can provide 12 or 24 sime ultaneous phone calls. The remaining one cable between Dinghai on Zhoushan Island and Ningbo on the mainland will go into trial operation soon, the department said. It will be able to carry 120 simultaneous telephone calls. [Text] [Beijing XINHUA in English 1312 GMT 8 Jun 82]

ZHEJIANG SUBMARINE CABLES--Hangzhou, 6 Jun (XINHUA)--Ten submarine cables linking Zhejiang's Zhoushan Islands have been installed, and nine of them are now used on a trial basis. This marks the beginning of wire communications service between these islands. Another submarine cable which links Ningbo with Dinghai, a county on one of the islands, will also be put into trial use shortly. [Beijing XINHUA Domestic Service in Chinese 0006 CMT 6 Jun 82 0W]

## LARGE BROADCASTING CENTER TO BE BUILT

SK221020 Seoul YONHAP in English 0745 GMT 22 Jun 82

[Text] Seoul, June 22 (Yonhap) -- The Korean Government plans to build a large state-of-the-art broadcasting center with international capabilities as part of its preparations for the 1988 Summer Olympic Games in Seoul.

An official at the state-run Korea Telecommunication Authority (KTA) said Tuesday that the projected center will control the country's existing broadcasting networks during the Olympic Games.

Equipped with closed-circuit and multiple-sound TV facilities, the broadcasting center will be able to provide worldwide media organizations covering the games with the best possible services, including film editing and production and direct transmission to their home countries.

The closed-circuit TV system, linking wired service lines between a control room and 43 sites throughout Korea, will make it possible to monitor other sports events while simultaneously viewing live competition. The multiple-sound TV system will enable spectators from different countries to watch televised sports events in languages they understand, the official explained.

The KTA has started a basic feasibility study of the plan by securing expanded channels, seeking changes in frequencies and purchasing modern telecasting facilities. Test operations are expected to begin next year. The official said the government is considering two plans for financing the center. One plan calls for constructing the center with private funds and placing it under private ownership after the Olympic Games are completed. Under the second plan, the center would be paid for with government money and managed by a public broadcasting organization when the Olympiad is over.

The broadcasting center will be equipped with editing and production rooms, video tape recording rooms, coordination rooms and studios. It will telecast sports events to the world through a telecommunication satellite.

The most likely location of the center will be Chamsil Sports Complex or Yoido Island, both in Seoul, the official said.

0896

CSO: 5500/2269-F

'TASS', 'TANJUG' OFFICIALS SIGN COOPERATION ACCORD—Begrade, 8 Jun (TASS)—TASS Director General Sergey Losev and TANJUG Director General Aleksandar Bakocevic have signed here today a new agreement on cooperation between the two news agencies to replace the agreement of 1962 in effect now. The signing ceremony was attended by U.S.S.R. Ambassador to Yugoslavia Nikolay Rodionov. Sergey Losev, who is currently visiting Yugoslavia at the invitation of TANJUG, was received by Irpe Jakovlevski, executive secretary of the presidium of the central committee of the league of communists of Yugoslavia, and met with Mitko Calovski, federal secretary for information. In the course of his stay in Yugoslavia, Sergy Losev visited the socialist republic of Montenegro where he met with Olga Perovic, republican secretary for information. [Text] [LD082158 Moscow TASS in English 1924 GMT 8 Jun 82] 0440

CSO: 5500/2269-F

PANAMA

## BRIEFS

DIRECT DIALING EXPANSION--The National Institute of Telecommunications announced that automatic telephone communication has been established with Argentina, Chile, Bolivia, Brazil and Colombia, through the Direct Dialing System. [Text] [PA212148 Panama City LA ESTRELLA DE PANAMA in Spanish 15 Jun 82] 7497

TV TO TROOPS IN S. LEBANON—Ever since Friday night the Communications Ministry has been transmitting Israeli television broadcasts to southern Lebanon after having installed a special transmitter for that purpose. Communications Minister Mordekhay Tzipori gave the order to do so. The broadcasts can be received on UHF channel 24. The broadcasts are transmitted to all the areas south of the general Al-Nabatiyah-Metulla-Sidon line and in higher altitudes even north of that line. Meanwhile, Communications Ministry engineers are carrying out surveys in Lebanon in an effort to find out where another transmitter should be set up to cover the entire territory of Lebanon where IDF soldiers are stationed. [Text] [TA210748 Tel Aviv HA'ARETZ in Hebrew 21 Jun 82 p 5]

LESOTHO

#### BRIEFS

UNESCO MISSION ARRIVES--A two-man mission of UNESCO arrived in Maseru yesterday afternoon on an official visit. They are Mr (Alex Kwamin), the Nairobi-based regional advisor for communications in Africa, and Mr (Dekorter), a UNESCO engineer based in Amsterdam, Holland. During their stay here, the UNESCO officials will discuss with the authorities of the Ministry of Information and Broadcasting plans to establish the Lesotho National News Agency. When fully operational, it is expected that a daily newspaper will be launched in Lesotho. It is also expected that the Lesotho National News Agency will feed the Pan-African News Agency with news. Two officials of the Ministry of Information and Broadcasting recently attended the meeting of the Pan-African News Agency in Lusaka. This morning the UNESCO officials had a meeting with the permanent secretary for information and broadcasting, Ntate (Viti Ndobe), and this afternoon they will pay a courtesy call on the minister of information and broadcasting, Ntate C.D. Molapo. [Text] [MB240620 Maseru Domestic Service in English 1130 GMT 23 Jun 82]

cso: 5500/5837

FAEROESE TELEVISION WILL BE OPERATED BY PRIVATE GROUP

Helsinki HUFVUDSTADSBLADET in Swedish 9 May 82 p 12

[Article by Ulf Stambej]

[Text] "Utvarp Foroya" [Faeroese Radio] is the name of what is and has been the radio station on the Faeroe Islands since 1957. And what will become Faeroese Television sometime toward the middle or end of this decade will be called "Sjonvarp Foroya" [Faeroese Television]. Radio (and TV) are among the "special areas" where that island country rules supreme.

For 20 years the Faeroese have been preparing for the time when they, too, will step into the television age. For the past 2 or 3 years, TV sets have been part of the furniture in their homes—but only as a personal exception. And it looks as though it will still be a while before the six established political parties in that self-governing island country are able to agree on the details concerning "Law No 31/1981: Television Law."

That law would establish an organization like the one set up for radio, in which everything is managed by a director (for administrative matters) and a Radio Board (programming matters).

The Faeroese Parliament--known as the "Lagting"--appoints five members of the board, and the listeners' association fills the sixth seat. The board's job is to draw up and establish the main outlines of the programming every year.

But the question of whether to have one director to oversee both radio and TV or to appoint separate directors has already split the politicians into two camps. Opinion is moving toward the latter alternative, however.

How the whole thing will be developed and financed is another question that looks like turning into as big a lottery as the one held when the Faeroese got their new radio center at a cost of between 15 and 16 million kroner (about 9 million markkaa). The way the politicians have figured it out, the TV director will get along with three permanent employees and a few free-lancers. Hopes of being able to start their own production in the near future do not seem very strong. NORDSAT or some other television satellite is one idea that the 43,000 Faeroese have scarcely given a thought to.

Or are they perhaps hoping deep down that the other Scandinavians and maybe the British will quickly close their eyes in case one or two parabolic antennas pop up on Faeroese mountaintops?

## "Lottery" Was the Word

It is with justifiable pride that the radio people show off their completely new radio center at the entrance to Torshavn, where the considerably more expensive Nordic House is already under its own roof on the adjoining lot.

Most of the construction cost--12 million kroner--was gotten together by sponsoring a radio lottery in the 1970's. It took barely 3 years to build the 2,000-square-meter all-purpose building--and along with it, the Faeroe Islands got a concert studio with room for an audience of 200.

For the rest of it, radio activity is financed by annual license fees and government support, as is done here in Finland. One feature, however, is that people with impaired sight or hearing are exempt from paying the license fee. But anyone else who tries to evade the fee gets a good crack over the head with the law book--regardless of whether he has bought shares to improve the programming or not.

Another special feature of Faeroese radio financing is that the system operates on what could best be described as public advertising. The government agency that wants to get its message across gives the information to the radio station and then pays so much for every word that goes out over the air. But no commercial advertising is allowed.

Mostly News and Music on Radio

If we take a look at what the Faeroese get in return for the money they spend on radio licenses, we immediately see that music dominates the airwaves (47 percent). If we add to that the 21 percent of total broadcasting time devoted to news and feature reports, we have already accounted for two-thirds of all the programming.

The rest of the time is devoted mainly to broadcasting church services (nearly 9 percent) and request concerts (5.5 percent). Lectures, recitations, and general reportage take up just under 10 percent of the time, while the children get only 2.1 percent—the same as broadcasts from Parliament. Theater and similar programs get only 1.3 percent, or about as much as entertainment, while education does not account for even 1 percent.

In total, "Utvarp Foroya" is on the air for just over 2,000 hours per year on its current schedule, and 10 percent of that time is devoted to repeat programs.

In addition to its own broadcasts, which have been in stereo since 1971, the station also supplies programs to the Danish and Greenland radio stations and to Norwegian shortwave radio.

To reach its 16,000 or so registered listeners, the station has three main transmitters and eight auxiliary transmitters on the FM band. Since 1978 it has also used the medium waveband, which is to be beefed up in the near future.

So Faeroese Radio does not broadcast continuously throughout the working day. It broadcasts in six blocks on weekdays and in two blocks on Sundays and holidays. If we divide the number of broadcast hours—2,234 hours in 1980—by the number of days in the year, we get an average of 6 hours per day.

### Entertainment and Sports on TV

On 1 November 1978, a law went into effect permitting private TV associations to rebroadcast programs bought in Denmark in the Faeroes. That law also marked the start of work to expand the broadcasting network, which comprises three transmitting stations and currently reaches from 75 to 80 percent of the islands and the population.

The government and the posts and telecommunications service have the primary rights to TV on the islands, but they have "delegated" the job to the associations. The largest TV association is the one in Torshavn, with just over 2,200 members. It began its regular transmissions in April 1979.

The other associations are on Eysturoy Island (700 members), in Klaksvik on Bordoy Island (720 members), in Tvoroyri and Vagur on Suduroy Island, in Vestmanna on the main island of Streymoy, on Sandoy and Vagar Islands, and in Eidi. Along with Torshavn, which covers the greatest area, Tvoroyri, Vagur, and Eidi also have their own transmissions.

The Torshavn association, which has about 20 hours of programming per week-on Tuesdays, Fridays, Saturdays, and Sundays--rebroadcasts on a schedule of nearly 1,000 hours annually.

The dominant feature here is entertainment, with 419 hours, or 42.3 percent of the total. Sports take up close to 20 percent (185 hours), and programs on current events represent a combined total of 16 percent (156 hours).

Children's programs amount to 8 percent (71 hours), and theater and music combined get nearly 11 percent (107 hours), while church takes up just over 4 percent (43 hours).

In 1980, the Faeroese themselves produced 56 hours of programming, of which half consisted of church services and programs with a religious content. Children's programs accounted for 6 hours, current events took up 15 hours, and 7 hours of music and Faeroese dance were shown. Local production increased by over 100 percent compared to the year before.

### Popular Entertainment

It costs 165 kroner per quarter to watch the TV programs sponsored by the associations--exactly the same as a radio license.

Investigation quickly reveals that as one quick result of the introduction of television, the Faeroese are tied to their living rooms on days when there is TV. Anyone who wants a big turnout for public activities is well advised to choose an evening when the TV screen is dark.

11798

CSO: 3109/164

## INUKSAT SATELLITE TO ALLOW DIRECT DIALING TO DENMARK

Godthaab GRONLANDSPOSTEN in Danish 19 May 82 p 20

[Text] Greenland will be able to dial Denmark direct by 1 February of next year. Subscribers in the Egedesminde district will be able to dial Danish subscribers by themselves as early as 1 November of this year.

At the same time there will be a drastic reduction in the rate per minute for calls between Greenland and Denmark--from 20 kroner down to 12. This 12-kroner rate will be a flat charge for direct-dialing connections at any hour of the day or night.

Direct dialing to Denmark will be possible when the Post and Telegraphic System completes the ground station at Blavand, scheduled for 1 October.

Today there are 23 satellite channels (and 6 cable connections) available for contacts between Greenland and Denmark. When the Blavand station goes into operation, the figure will rise to 100 satellite channels. And that will both eliminate waiting time and provide direct dialing capacity.

"We know from experience that the number of calls will rise around 50 percent with a transition to direct dialing," said section engineer E. A. Sondergaard, deputy chief of the Greenland Telesystem. "Subscribers will benefit in the form of a rate reduction."

The reason why Egedesminde will get direct dialing to Denmark first is that the ground station there can come in direct contact with Blavand via the Greenland satellite system, Inuksat.

The Godthaab ground station, however, goes through the satellite stations at Tanum in Sweden and must be rebuilt to fit into the Inuksat system. This rebuilding cannot be started until the Egedesminde-Blavand connection has been established.

Direct dialing will come last to Upernavik and Scoresbysund where the exchanges must be altered and where it is unlikely that the necessary changes will be completed before the early summer of 1983.

6578

#### EXPANSION OF GODTHAAB EXCHANGE TO AID INTER-CITY PHONE NET

Godthaab GRONLANDSPOSTEN in Danish 12 May 82 p 6

[Text] The expansion of the inter-city exchange in Nuuk and other steps should prevent overburdening the network.

Over most of Greenland recently there have been problems at times in getting through on the telephone, especially on Friday afternoon. That is because the network is overloaded, according to telephone engineer Hans Hansen of Nuuk.

He said that an expansion of the exchange for inter-city connections in Nuuk is under way and that it will soon be possible to add 1000 new subscribers in the city of Nuuk.

While work is being done to increase capacity, subscribers will have to put up with poorer service. There is a greater danger of overloading the network while the work is being done, because it may be necessary at times to remove parts of the system from operation.

"Things will have to get worse for a while in order that they may become better," said Hans Hansen. He said that a noticeable improvement of the problems should occur during the summer. The expansion of the inter-city exchange in Nuuk, which serves all of central Greenland, has largely been completed. It just has to be tested by some technical experts from Denmark before it is ready to use.

"Actually we have an excellent modern telephone network in Greenland," said the telephone engineer. "The problem is that people use the telephone more and more and we lack both the money and the personnel to expand rapidly enough. But we will catch up with the need in the long run."

When there are problems getting a connection, Hans Hansen recommends that the caller calm down and cool it a little.

"Simply picking up the receiver starts a lot of things going at the exchange and this helps block the network," he said. "The best thing to do is wait a while and then try again. Otherwise you simply inconvenience both yourself and others."

6578

TELEGRAPH'S ROLE BEING REDUCED -- In mid-March, the last telegraph manager in Tasiilaq left town. Svend Age Mortensen, familiarly known as Sam, retired at the early age of 55 after 36 years of service with the Telesystem. started his career in Narsarsuaq in 1946--working for several periods as a telegraph operator in Illoqqortoormiut and Prins Christianssund, for 3 years as chief assistant in Nuuk and then as telegraph manager in Cape Tobin. He then went to Ilulissat-Dundas-Nuuk and back to Cape Tobin. He has been in Tasiilaq since 1975. When the JCAO [expansion unknown] cooperation began to be cut back in 1975, corresponding reductions were made in the work force at Tasiilaq which were also partly due to the increase in automation. And Tasiilaq, once one of the big Telesystem stations, now employs only 13 men and women telecommunications workers. Of these, 4 were called in from the outside. With the aid of natural attrition, these 4 jobs will also be taken over by local residents. The first telegraph manager in Tasiilaq was employed in 1925 and that position will now be eliminated with Sam's departure. He is not very enthusiastic about having to enjoy his declining years at such a young age. And he is hoping to get work as a replacement from time to time in Illoggortoormiut, where he and his wife Ingeborg, who is from that town, are going to live in the house they built there. [By Roland Thomsen] [Text] [Godthaab GRONLANDSPOSTEN in Danish 19 May 82 p 20

## MINISTER DISCUSSES NEED FOR NORDIC TV SATELLITE

Oslo AFTENPOSTEN in Norwegian 18 May 82 p 3

[Article by Morten Malmo: "Langslet Wants Freedom of Choice and Variety, But: No New Norwegian Channel Without Satellite"]

[Text] "We will hardly get any new Norwegian TV channel without going via a satellite solution, either on a Nordic or a European basis," says Minister of Culture Lars Roar Langslet in a conversation with AFTENPOSTEN. Other solutions will be too expensive. He believes that in the 1980's we will get radio and TV financed by advertising here in this country, but not in NRK [Norwegian National Broadcasting]. "It is the satellite transmissions with advertising which is the reason this question now must be raised anew," maintains Langslet.

Last Friday the government presented its parliamentary report on media development and new types of broadcasting. The government here informs Parliament about the contents of its broadcasting policy: freedom of choice for the public will be emphasized and so will freedom of expression in the media and greater participation in creating and sending programs.

[Question] Everybody knows that a growing current of competition is now coming from the outside. We must not be passive participants, but we must release forces to create a greater breadth in Norway--from local programs to programs with international aims.

[Answer] This is mobilization of responsibility to secure Norwegian culture. This is also the deepest motive behind a NORDSAT collaboration. When the offers from Europe are pushing forward, we must in any case be able to see the transmissions from our neighbor countries.

[Question] Without a satellite solution a new Norwegian TV channel will mean up to 2 billion kroner in investments. And one-half of that with a satellite. Will we get a new Norwegian TV channel without the use of a satellite?

[Answer] I don't think so. A so-called ground-based system will be too expensive.

[Question] Are you optimistic about NORDSAT's future?

[Answer] Yes, the situation is somewhat brighter now. However, one problem is that the Swedish Social Democrats are against NORDSAT. If they get into a government position, we may have new problems. We have to hope that in any case they will change their standpoint if it turns out that bad. If NORDSAT fails, Norway has to look around for other satellite solutions.

[Question] Is this being done today, already?

[Answer] No, we do not believe it is correct to work in parallel with another presentation, while the NORDSAT case is being straightened out.

[Question] In the parliamentary report presented it says that the tests with short-range radio and cable TV will continue even after the end of this year. Does that mean that those who today have permission to carry out experimental operation must at the end of the year file an application for continued operation in 1983?

[Answer] We have not taken any position on the procedure. We will evaluate both old and new applications. We intend to give permissions for test operation in northern Norway and on Svalbard, but parliament will discuss this first. In the last "round" we were not able to give more permits. The legal authority for granting exceptions from NRK's monopoly regulations was too restricted.

[Question] What do you yourself believe about the tests which have been made with short-range radio and cable TV?

[Answer] I have neither seen nor heard very much. My main impression is good, and I believe that in the first round we could not expect any more.

[Question] So far the tests have generally been carried out by amateurs. Would not test activity based in professional environments have given the politicians a better foundation for a decision when the further pattern is to be established?

[Answer] All modern media starts in the amateur stage. I believe that today's tests will push forward talents and variety at the same time as we gain experience. We will place great weight on quality, but we can not set up the same demands for, for instance, simple radio transmissions on a local level as for national transmissions, For instance, who would demand that a club newspaper should be edited in the same way as a large newspaper? Personally I believe that what is poor will disappear and make space for quality.

[Question] Will we get advertising in Norwegian radio and TV during the 1980's?

[Answer] I personally believe that. The satellite age places this question in a different light than previously. I believe the only chance for getting a greater variety outside NRK lies in using advertising. Of course, we should have clear limitation rules, for instance, that advertising must not interrupt the transmissions. Of course, here everybody is scaring people by referring

- social development. New opportunities due to modern computer and micro-processor technology increase its importance.
- --The international telecommunications market between industrial countries with their own telecommunications industry is therefore completely closed. Norwegian producers themselves have never been allowed to submit bids in such countries.
- --The seriousness of the situation is emphasized by the fact that the proposal by the EC committee in 1981 that 10 percent of the market for telecommunications equipment within the EC countries should be opened for free competition was voted down. This happened in spite of the fact that free competition about these 10 percent should apply only within the EC.
- --On such a background it is not protectionism to protect our own telecommunications industry. The claim by OKONOMISK RAPPORT that the motto of the Industry Association is: "Competition is good, but save us from it" falls because of its own unreasonableness when the background is known.
- --The procurement policy guidelines of our own country as of 1 October 1979 are clear. They say: "Government procurement should be utilized with a view toward deliberate development of Norwegian industry and production. This is especially of interest in the purchase of technically advanced material."
- --Several of the industrial countries which through national development contracts and a large closed home market have covered their development cost will welcome the Norwegian initiative. In the first round we will also most probably get lower prices, but the assumed savings will be significantly reduced by the demands for partial production in Norway and transfer of technology and competence.
- --A considerable part of the values created in Norway will be returned to the State in the form of private and corporate taxes and fees. A higher price would therefore not necessarily lead to increased net expenses for the State.

What then do we achieve by international bids for telecommunications services:

- -- Considerably reduced values created in Norway.
- --Conversion of jobs from a high priority technology field.
- --Poorer international competitive abiliby (EB [Elektrisk Bureau A/S] and STK [Standard Telefon og Kabelfabrik A/S] today export in free competition to developing countries) and thus further reduced creation of values.
- --Poorer trade balance--more imports, less exports.
- --Considerably reduced electronics environment in Norway.
- --Delay in digitizing the telephone exchanges because a new supplier must get established in Norway and adapt to Norwegian conditions and regulations.

--The establishment of a new supplier in Norway, possibly on top of the remains of the suppliers which have to cut back.

The prices of the equipment which has been recommended procured through international bids amount to approximately 10 percent of the costs of the telecommunications [project]. A 10 percent lower price on the equipment would thus mean a reduction of approximately 1 percent in the telephone costs if we would not simultaneously have had all the other negative effects. The conclusion becomes clear: the telecommunications problems in Norway must be solved with the other and more constructive proposals which are being presented by the Telecommunications Committee.

8958

## GOVERNMENT OPENS UP TELECOMMUNICATIONS TO BIDS FROM ABROAD

Oslo AFTENPOSTEN in Norwegian 9 Jun 82 p 5

[Text] The government will allow four foreign firms to make bids when the Telecommunications Agency orders new telephone exchanges based on new computer technology. In the past, deliveries to the Telecommunications Agency have been limited to Elektrisk Bureau and Standard Telephone and Cable. "The fact that we are asking international companies to submit bids for the first time could lead to cheaper exchanges and thus cheaper telecommunications service," said Transport and Communications Minister Inger Koppernaes at a press conference yesterday.

The four companies are Siemens, which is already established in Norway, Phillips, which also has a division in this country, the Canadian company, Northern Telecom, which works together with Gustav A. Ring, and the Japenese Nippon Electric Co.

They are to submit bids on exchanges serving a total of 500,000 numbers. "We will take into consideration both the needs of the Telecommunications Agency and the industrial policy aspect," the transport minister stressed. Therefore it will be a condition for granting the contract to one of the foreign companies that firms are established in Norway corresponding to those that would be involved if Elektrisk Bureau or Standard Telephone and Cable got the job.

Companies that submit bids must document the economic and other resources they wish to utilize on the Norwegian market. In evaluating the bids, great emphasis will be placed on the future development possibilities of the firms.

"I think this is a unique chance for Elektrisk Bureau," said cabinet minister Koppernaes. "EB [Elektrisk Bureau] has the big L. M. Ericsson company behind it and is already established in Norway. STK [Standard Telephone and Cable] is also backed by a large concern, namely ITT. Thus both firms should have a good chance of competing with the four foreign firms that will be asked to submit bids."

The new exchanges the Telecommunications Agency will order will be cheaper than today's exchanges. First and foremost because the new system is based

on advanced computer technology--digital instead of analog technology--but also because the Telecommunications Agency will go in for one type of exchange for the entire country. Now there are 10 different types around the country.

Transport Minister Inger Koppernaes ran into stiff resistance from just about everyone in the field with regard to her proposal to open up for international bidding. A survey made by NTB shows that the board of the Telecommunications Agency, the National Organization of Trade Unions and the Norwegian Industrial Association are among the organizations in favor of continuing to restrict bidding opportunities to the Norwegian market.

The government briefed the Storting Transportation Committee on its decision yesterday and on its intention to send out the invitations to bid right away in order to save time with the inclusion of a reservation on gaining Storting approval for the new practice.

## COMMUNICATIONS INDUSTRY'S PROBLEMS IN GLOBAL MARKET AIRED

Oslo AFTENPOSTEN in Norwegian 12 May 82 p 30

[Commentary by Peter Planke, Director at Tomra Systems A/S: "The Telecommunications Administration and International Offers"]

[Text] There must be better ways to solve our telecommunications problems than for Norway as the only industrial country with its own telecommunications industry to go in for bids from countries which have completely excluded all import of telecommunications equipment.

A public appointed "telecommunications committee" has considered the situation for the Telecommunications Administration and the tasks in the 1980's. The committe proposes that the Telecommunications Administration utilize international bids in the procurement of new digital telephone exchanges.

To start with such an attitude seems natural. The lowest possible price is desired as a basis for less expensive telecommunications services. Open international markets are also desired as a necessary basis for Norwegian electronics industry with a small home market.

Our communications minister, Inger Koppernæs, has strongly approved of the recommendation by the committee. OKONOMISK RAPPORT has become enthusiastic almost without reservations because of our cabinet minister's confidence that international bids will solve telecommunications problems.

Why then has the Industry Association and its president, Onarheim, the National Organization of Trade Unions and the electronics industry gone against the recommendation by the committee? Do they not still want free competition and better telecommunications services? The facts of the case should be a good explanation of why the Telecommunications Committee, the communications minister and the OKONOMISK RAPPORT get opposition:

--The Telecommunications Administration represents Norway's biggest home market in the field of professional electronics and is clearly the largest buyer from a relatively modest Norwegian electronics industry.

--All industrial countries realize the significance of a strongest possible national electronics industry as an important stage in further industry and

to the situation in the United States. In Europe such interruptions are not customary.

In NRK I believe that advertising should not be used. The income should be based on licenses and fees.

Langslet reports that the government will appoint a committee which will evaluate the use of advertising in TV and radio.

[Question] The debate is raging about the placement of P2 in the radio. Do you believe that P2 should be placed outside Oslo, which you also did as representative in parliament?

[Answer] The entire conservative parliamentary group was in favor of it in principle. We will decide on this question soon. A task force in the department has been in favor of moving it out, on the basis of a tight economic proposal, which does not require increased license payments.

[Question] NRK's district officers have had and will go through a strong expansion. Doesn't this save NRK's district profile?

[Answer] I have a different point of view. To me it is essential that a program 2 in the radio becomes an environment outside Marienlyst, so that we will have greater variety and more competition.

[Question] Is NRK effective enough today? Is enough being produced?

[Answer] If we compare with other countries in Europe, our broadcasting program is very thin. We can not brag about the productivity. The competition from the outside will therefore also be an incentive to tightening up, at the same time as NRK should have a freer position. This we have also said in the report.

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